

Amendments to the Claims:

Please amend the claims as follows:

6. (amended) Apparatus for a combined lithographic/flexographic printing process comprising:
a plurality of successive printing stations for printing color images on a substrate in a continuous in-line process;

one of said printing stations comprising a first offset lithographic printing station printing an image using the lithographic process;

one of said printing stations comprising a first offset flexographic printing station, downstream of the first offset lithographic printing station, printing an aqueous-based vehicle image using the flexographic process to form a metallic coating;

a suspended metallic material being included in said aqueous-based vehicle image; and
at least one of the successive printing stations comprising [an offset] a second offset lithographic printing station printing a color image over the aqueous-based vehicle image using the offset lithographic process in said continuous in-line process.

10. (amended) Apparatus for creating a combined lithographic/flexographic printing process comprising:

a plurality of successive printing stations for printing color images on a substrate in a continuous in-line process;

one of said stations comprising a first flexographic printing station for printing a first color image using the flexographic process;

one of said stations downstream of the first flexographic printing station comprising a second flexographic printing station for printing or coating the substrate using the flexographic process;

and

at least one of the successive printing stations comprising an offset lithographic printing station for printing a second color image over the first color image using the offset lithographic process in said continuous in-line process.

15. (twice amended) Apparatus for a combined lithographic/flexographic printing process comprising:

a plurality of successive printing stations for printing color images on a substrate in a continuous in-line process, said printing stations including both lithographic and flexographic printing stations;

one of said printing stations comprising a first flexographic printing station;

one of said printing stations comprising a first lithographic printing station;

a blanket cylinder at [at least a first one of] said first flexographic printing station [stations];

an impression cylinder associated with at least said first one of said flexographic printing stations;

flexographic ink-providing means at said [at least] first [one of said] flexographic printing station [stations] for applying a flexographic ink to said blanket cylinder to form an image;

a substrate for receiving said flexographic ink image transferred from said blanket cylinder; [and]

[at least one subsequent] a second lithographic printing station in said in-line process for receiving said image printed substrate and printing an additional colored ink image on said substrate on top of said flexographic ink image using offset lithography; and

a second flexographic printing station.

16. (amended) Apparatus as in claim 15 further comprising:

a plate cylinder at said [at least first one of said] first flexographic [stations] station;

a flexographic plate on said plate cylinder for receiving and transferring said flexographic ink to said blanket cylinder; and

said flexographic ink-providing means including a flexographic ink supply and an anilox roller associated with said flexographic ink supply for transferring said flexographic ink to said flexographic plate.

17. (amended) Apparatus for a combined lithographic/flexographic printing process for printing a multicolored image comprising:

a plurality of successive printing stations for printing color on a substrate in a continuous in-line process, said printing stations including both lithographic and flexographic printing stations;

[at least] one of said flexographic printing stations being a first flexographic printing station having:

(1) a plate cylinder and a blanket cylinder, said plate cylinder including a flexographic plate having an image thereon for transferring a flexographic color ink image to said blanket cylinder;

(2) an etched anilox roller for applying a flexographic color ink to said flexographic plate on said plate cylinder;

(3) an impression cylinder in ink-transfer relationship with said blanket cylinder for transferring said flexographic color ink image from said blanket cylinder to said substrate; [and]

at least one of said succeeding printing stations being a lithographic printing station using offset lithography for printing additional colored ink images on top of said flexographic ink image; and

one of said flexographic printing stations being a second flexographic printing station.

29. (amended) A method of combining lithography and flexographic printing in a continuous in-line process comprising the steps of:

providing a plurality of successive lithographic/flexographic printing stations for printing colored ink images on a substrate;

printing a flexographic ink image on said substrate at at least a first one of said flexographic stations;

transferring said printed substrate to at least one subsequent lithographic printing station in said continuous in-line process; [and]

printing colored ink images on top of said flexographic ink image at [at least one of] said subsequent lithographic printing [stations] station with an offset lithographic process; and
coating said substrate at a second one of said flexographic stations.

37. (amended) A method of combining offset lithography and flexographic printing in a continuous in-line process comprising the steps of:

providing a substrate;

applying a flexographic ink to a blanket cylinder in a pattern with a coating head at a first flexographic printing station;

transferring said pattern of flexographic ink from said blanket cylinder to the substrate;
transferring said substrate to a second flexographic printing station;

applying a pattern of flexographic ink to the substrate using the second flexographic printing station;

and

printing a waterless ink pattern over said flexographic ink pattern on said substrate using at least one subsequent offset lithographic printing station in said continuous in-line process.

38. (amended) A method of combining lithography and flexographic printing in a continuous in-line process comprising the steps of:

printing an aqueous-based vehicle image having suspended particles therein on a substrate at a first flexographic printing station;

transferring said image printed substrate to [at least one additional] a subsequent printing station in said continuous in-line process; [and]

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printing additional colored ink images on said printed substrate over said aqueous-based vehicle image in an offset lithographic process at said at least one additional printing station in said in-line process; and

coating over said colored ink images on said substrate using a flexographic process.

Please cancel claims 42-43.

44. (three times amended) Apparatus for a combined lithographic/flexographic printing process comprising:

a substrate;

a plurality of successive printing stations for depositing a series of images on one side of a substrate in a continuous in-line process;

one of said printing stations comprising a first flexographic printing station for printing a first liquid vehicle image on said substrate using a flexographic process; and

one of said printing stations subsequent to the first flexographic printing station comprising a first lithographic printing station;

one of said printing stations subsequent to the first lithographic printing station comprising a second flexographic printing station for printing a second liquid vehicle image on said substrate using a flexographic process; and

one of said printing stations subsequent to the second flexographic printing station comprising a second lithographic printing station;

whereby the second liquid vehicle image is printed on top of at least a portion of that printed at the first lithographic printing station.

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46. (three times amended) Apparatus as in claim 44 wherein at least one image deposited by one of the lithographic printing stations comprises ink.

Please cancel claims 49-57.

58. (three times amended) Apparatus for a combined lithographic/flexographic printing process comprising:

a plurality of successive printing stations for depositing a series of images on a substrate in a continuous in-line process, said printing stations including, both lithographic and at least two flexographic printing stations;

a blanket cylinder at at least a first one of said flexographic printing stations;
flexographic ink-providing means for applying a flexographic ink to said blanket cylinder to form an image on one side of a substrate;

a substrate for receiving said flexographic ink image transferred from said blanket cylinder; and

at least one subsequent lithographic printing station in said in-line process for receiving said image printed substrate and printing an additional colored ink image on said substrate on top of said flexographic ink image.

Please ~~cancel~~ claims 60-81.

82. (Four times Amended) A method of combining lithography and flexographic printing in a continuous in-line process comprising the steps of:

(1) providing a plurality of successive printing stations for depositing a series of images on a substrate in said in-line continuous process;

(2) utilizing an anilox roller to transfer a liquid ink as one of said series of images to a flexographic plate image at least one of said printing stations;

(3) printing said liquid ink from said flexographic plate image to one side of said substrate;

(4) transferring said printed substrate with said liquid ink image to a subsequent printing station in said inline printing process;

(5) repeating steps (2)-(4) at subsequent printing stations in said in-line process to achieve a desired opacity ink image on the one side of said substrate; and

(6) printing an ink pattern on said substrate using an offset lithographic process.

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Please cancel claims 85-151.

152. (new) Apparatus for a combined lithographic/flexographic printing process comprising:

a substrate having a first side and a second side;

a plurality of successive printing stations for printing color images on the substrate in a continuous in-line process, the successive printing stations including:

a first lithographic printing station for printing an image on the first side of the substrate using the lithographic process;

a first flexographic printing station, subsequent in the continuous in-line process to the first lithographic printing station, for printing an image on the first side of the substrate using the flexographic process;

a second lithographic printing station, subsequent in the continuous in-line process to the first flexographic printing station, for printing an image on the first side of the substrate using the lithographic process; and

a second flexographic printing station, subsequent in the continuous in-line process to the second lithographic printing station, for printing an image on the first side of the substrate using the flexographic process.

153. (new) Apparatus for a combined lithographic/flexographic printing process comprising:
a substrate;

a plurality of successive printing stations for printing color images on the substrate in a
continuous in-line process, the successive printing stations including:

a first flexographic printing station for printing an image on the first side of the substrate
using the flexographic process;

a first lithographic printing station, subsequent in the continuous in-line process to the
first lithographic printing station, for printing an image on the substrate using the lithographic
process;

a second flexographic printing station, subsequent in the continuous in-line process to the
first lithographic printing station, for printing an image on the substrate using the flexographic
process; and

a second lithographic printing station, subsequent in the continuous in-line process to the
second flexographic printing station, for printing an image on the first side of the substrate using
the lithographic process.

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154. (new) Apparatus for a combined lithographic/flexographic printing process comprising:
a substrate;

a plurality of successive printing stations for printing color images on the substrate in a
continuous in-line process, the successive printing stations including:

a first lithographic printing station;

a first flexographic printing station, subsequent in the continuous in-line process to the
first lithographic printing station;

a first dryer, subsequent in the continuous in-line process to the first flexographic printing
station;

a second lithographic printing station, subsequent in the continuous in-line process to the
first dryer;

a second dryer, subsequent in the continuous in-line process to the second lithographic
printing station;

a second flexographic printing station, subsequent in the continuous in-line process to the
second dryer; and

a third dryer, subsequent in the continuous in-line process to the second flexographic
printing station.

155. (new) Apparatus for a combined lithographic/flexographic printing process comprising:
a substrate;

a plurality of successive printing stations for printing color images on the substrate in a
continuous in-line process, the successive printing stations including:

a first lithographic printing station;

a first dryer, subsequent in the continuous in-line process to the first lithographic printing
station;

a first flexographic printing station, subsequent in the continuous in-line process to the
first dryer;

a second dryer, subsequent in the continuous in-line process to the first flexographic
printing station;

a second lithographic printing station, subsequent in the continuous in-line process to the
second dryer;

a third dryer, subsequent in the continuous in-line process to the second lithographic
printing station;

a second flexographic printing station, subsequent in the continuous in-line process to the
third dryer; and

a fourth dryer, subsequent in the continuous in-line process to the second flexographic
printing station.

156. (new) A method for a combined lithographic/flexographic printing process, the method comprising the steps of:

providing a substrate having a first side and a second side;

printing an image on the first side of the substrate using a first lithographic printing

station;

transferring the substrate from the first lithographic printing station to a first flexographic printing station;

printing an image on the first side of the substrate using the first flexographic printing

station;

transferring the substrate from the first flexographic printing station to a second lithographic printing station;

printing an image on the first side of the substrate using the second lithographic printing

station;

transferring the substrate from the second lithographic printing station to a second flexographic printing station;

printing an image on the first side of the substrate using the second flexographic printing

station.

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157. (new) A method for a combined lithographic/flexographic printing process, the method comprising the steps of:

providing a substrate;

printing an image on the substrate using a first flexographic printing station;

transferring the substrate from the first flexographic printing station to a first lithographic

printing station;

printing an image on the first side of the substrate using the first lithographic printing

station;

transferring the substrate from the first lithographic printing station to a second

flexographic printing station;

printing an image on the first side of the substrate using the second flexographic printing

station;

transferring the substrate from the second flexographic printing station to a second

lithographic printing station;

printing an image on the first side of the substrate using the second lithographic printing

station.

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158. (new) A method for a combined lithographic/flexographic printing process, the method comprising the steps of:

providing a substrate;

printing an image on the substrate using a first lithographic printing station;

transferring the substrate from the first lithographic printing station to a first flexographic

printing station;

printing an image on the substrate using the first flexographic printing station;

transferring the substrate from the first flexographic printing station to a first dryer;

drying the substrate in the first dryer;

transferring the substrate from the first dryer to a second lithographic printing station;

printing an image on the first side of the substrate using the second lithographic printing

station;

transferring the substrate from the second lithographic printing station to a second dryer;

drying the substrate in the second dryer;

transferring the substrate from the second dryer to a second flexographic printing station;

printing an image on the substrate using the second flexographic printing station;

transferring the substrate from the second flexographic printing station to a third dryer;

and

drying the substrate in the third dryer.

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